Applicants: Jae-In JEONG and Tae-Gyoon LIM

Serial No.: Not Yet Known

Filed: Herewith

Page 2

## Amendments to the Claims:

Without prejudice or disclaimer, please amend claims 3, 4, 6, and 8-10 to read as shown below:

1. (Original) A resistance-heated boat for use in vacuum deposition of a metal evaporant to a substrate in a resistance heating manner, comprising:

a graphite block to be formed into a boat; and

a protective barrier formed at a surface of the graphite for preventing the graphite layer from reacting with the metal evaporant,

wherein the protective barrier includes an aluminum-rich compound layer and a nitrogen containing compound layer.

- 2. (Original) The boat as set forth in claim 1, wherein the protective barrier further includes a boron containing compound layer, which is distributed in the form of lump-shaped crystalline deposits.
- 3. (Currently Amended) The boat as set forth in claim  $1-\frac{2}{2}$ , wherein the protective barrier has a thickness in a range of 20 to 200 micrometers.
- 4. (Currently Amended) A method of manufacturing a resistance-heated boat for use in vacuum vapor deposition of a metal evaporant to a substrate in a resistance heating manner, comprising the steps of  $\div$ :
- a) forming a graphite block into the form of a boat having an evaporation cavity formed at a surface thereof for

Applicants: Jae-In JEONG and Tae-Gyoon LIM

Serial No.: Not Yet Known

Filed: Herewith

Page 3

positioning the metal evaporant such as aluminum;

- b) coating the surface of the graphite layer with a nitrogen containing compound;
- c) producing a protective barrier at the surface of the graphite surface by positioning the aluminum inside the evaporation cavity formed at the center of the graphite boat, and causing a reaction between the aluminum and the nitrogen containing compound through a heat treatment process, the protective barrier serving to prevent the graphite surface from reacting with the metal evaporant.
- 5. (Original) The method as set forth in claim 4, wherein the step b) includes the steps of:
- b-1) adding catalysts to the nitrogen containing compound, the catalysts serving to increase a rate of the reaction between the aluminum and the nitrogen containing compound; and
- b-2) coating the nitrogen containing compound added with the catalysts.
- 6. (Currently Amended) The method as set forth in claim 4—or 5, wherein, in the step b), the nitrogen containing compound is a boron nitride.
- 7. (Original) The method as set forth in claim 5, wherein the catalysts include at least one selected from among a group consisting of aluminum oxide, titanium, vanadium, iron, and silicone.
- 8. (Currently Amended) The method as set forth in claim 4 or = 5, wherein, in the step b), a resultant coating layer has a

Applicants: Jae-In JEONG and Tae-Gyoon LIM

Serial No.: Not Yet Known

Filed: Herewith

Page 4

thickness in a range of  $0.005 \text{ g/dm}^2$  to  $0.4 \text{ g/dm}^2$ .

- 9. (Currently Amended) The method as set forth in claim 4 or
- 5, wherein, the step b) is performed in a spraying manner.
- 10. (Currently Amended) The method as set forth in claim  $4 \cdot or$
- 5, wherein the step b) is performed in a painting manner.